

The Ansell logo is positioned in the top left corner of the page. It features the word "Ansell" in a white, sans-serif font, with a thin white horizontal line underneath the letters.

# Ansell

The background of the entire page is a photograph of a green tractor pulling a red agricultural sprayer through a field of young green plants. The sprayer has a large yellow tank and multiple nozzles that are spraying a fine mist of liquid onto the crops. The sky is a pale, hazy blue.

## AGRICULTURE

**Hazards & Solutions**

**[ansell.com](https://www.ansell.com)**



## PRIMARY HAZARDS IN AGRICULTURE

Sectors involved in agriculture represent one third of the total world's labor. In addition, agriculture concerns a wide range of sub-sectors, such as working with machines, animals, plants, foods or chemicals. As the sector is very diverse, it can be found all over the world – in indoor and outdoor environments as well as in various geographical and climatic conditions.

Agriculture relies on the use of chemicals to combat a wide range of threats. Treating animals, crops, plants and grain stores in agricultural or livestock production is commonplace. The potency required for effective control of pests makes these chemicals a significant threat to human health, leaving the workers open to exposure to a wide range of hazards and safety risks. It is essential to take suitable precautions against chemical exposure when handling pesticides. Trust Ansell to safeguard you by helping you select the right personal protective equipment (PPE) to consistently limit exposure.



Excessive noise



Chemical exposure



Respiratory issues



Heavy machine operation



Working with Animals



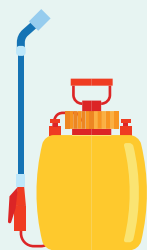
Heat and cold stress



Many agricultural workers suffer occupational accidents and ill health each year. One of the most important contributory causes of such ill health is exposure to dust and other organic substances such as pesticides and fertilizers, chemicals and infectious agents.

**Chemical Exposure:** There are risks involved in the use of all agrichemicals or phytosanitary products, including conventional solutions such as biocontrol, biological or mineral products. Even if the contamination is not visible, they are not harmless. 'Agrichemicals' is an umbrella term that encompasses a diverse range of substances in different concentrations and forms; including liquids, powders, granules and pellets. Those chemicals specifically target the improvement or control of growing conditions and processes by killing or minimizing threats to livestock and crops; such as animal pests, weeds and insects.

The action of these chemicals is defined in broad groups:



**Pesticides:** Pyrethroids, Sodium Fluoroacetate, Zinc Phosphide and Strychnine



**Herbicides:** Glyphosate, Paraquat and Diquat



**Insecticides:** Organophosphates and Neonicotinoids



**Fungicides:** Calcium Polysulfide, Captafol and Captan



**Fumigants:** Methyl Bromide

## AGRICULTURE HAZARDS & SOLUTIONS

The one common factor in using these chemicals is the high risk involved. As highly toxic substances, they can enter the body in a number of ways. This can be by dermal contact - which is through the skin. It can also be by inhalation into the lungs, or through ingestion into the gastrointestinal tract. The seriousness of any breach of safety is defined according to the properties of the substance, as well as the level and length of a worker's exposure. Exposure to a cocktail of chemicals can potentially present an even more harmful outcome than that of a single substance alone.

### HIGH PESTICIDE EXPOSURE PROTECTION

Millions of people work with pesticides with high concentration formulations. Whether they are responsible for mixing, loading, or applying them, or directly involved with the plants' production, they need to be protected. Wearing appropriate safety PPE will prevent skin contact with pesticides and any other chemical substances that can cause skin damages or diseases. Skin exposures during mixing and loading often occur at the interface of gloves and clothing. Ansell offers appropriate protective clothing and gloves needed to minimize all these risks that adhere to the latest regulatory standards.



#### AlphaTec® 58-535B

Reliable liquid-proof chemical protection with ANSELL GRIP™ Technology, a coating treatment that minimizes the force required to grip dry, oily and wet tools or materials, relieving hand and arm strength caused by poor grip.



#### AlphaTec® Solvex® 37-175

Combining ruggedness and chemical resistance, protects workers' hands exposed to a greater variety of chemical hazards.



#### AlphaTec® Solvex® 37-155

High performance nitrile compound providing an outstanding combination of chemical resistance and strength for optimal results in wet or dry work environments.



#### AlphaTec® 58-430

Medium-duty chemical protection with the flexibility and dexterity of an unlined nitrile shell through ANSELL GRIP™ Technology. Ideal for intermittent exposure to lubricants.



#### AlphaTec® Solvex® 37-185

Heavy duty chemical resistant glove covering to the top of the elbow and G2 level certified according to ISO 18889: 2019 standard.



#### AlphaTec® 2000 STANDARD - Model 111

Proven protective barrier to liquid & particulate biological hazards.



#### AlphaTec® 2300 Apron - Model 232

Provides a barrier to numerous inorganic liquid chemicals including acids and bases. Lightweight yet strong and durable in highly visible bright yellow polyurethane material.



#### AlphaTec® Glove Connector

Innovative design utilizing the latest polymer technology. Creates a liquid tight seal between glove and cuff. A consistent and reliable alternative to taping.

*Note: Product availability may vary. These styles serve as examples only. For tailored recommendations for your unique needs and applications, please request an AnsellGUARDIAN® assessment. Or use our self-service AnsellGUARDIAN® Partner tool to search our extensive chemical permeation and degradation data to identify the appropriate hand and body protection for the chemicals you use.*

## RELATIVELY LOW PESTICIDE EXPOSURE PROTECTION

Pesticide applications usually involve potential contact with more dilute materials than those handled during mixing and loading, but the duration of contact is normally much longer, therefore applicators are at substantial risk of exposure through both inhalation and dermal contact. Pesticide residues may remain on plant surfaces and in surface soil for extended periods of time following application. Early re-entry workers are likely to have contact with plants, soil and equipment surfaces with relatively high pesticide residues or dust like pesticide residues or fumigants. Skin contact with these residues or inhalation of volatilized residues can result in exposures to workers who enter treated areas after application.



### AlphaTec® 2000 STANDARD - Model 111

Good protective barrier to low concentration liquid chemicals, liquid & particulate biological hazards.



### AlphaTec® 37-300/ 37-310/37-320

Light duty gloves that provide nitrile protection against light acids, greases, oils and liquids. G1 level certified according to ISO 18889: 2019 standard.



### MICROFLEX® 93-260

Thin, chemical-resistant disposable glove offers tough chemical protection and unparalleled comfort. Three-layer design provides exceptional protection against acids, bases and solids in a single use glove.



### TouchNTuff® 92-600

The world's leading disposable glove for chemical splash protection. Strong and stretchy nitrile provides added durability.



### HyFlex® 11-925

The first ultra-light weight HyFlex® style to combine a 3/4 dip geometry, oil repellence and oil grip into a highly dexterous, high comfort glove. GR level certified according to ISO 18889: 2019 standard.



### HyFlex® 11-926

This unique blend of protection, performance and flexibility features bridges the gap from previous generations of 3/4 dip oil repellent general purpose gloves. GR level certified according to ISO 18889: 2019 standard.



### HyFlex® 11-931

The lightest weight cut resistant and oil resistant glove with reinforced thumb crotch that provides excellent durability for extended wear. Protected against lacerations, oil and industrial fluid exposure. GR level certified according to ISO 18889: 2019 standard.

**Note:** Product availability may vary. These styles serve as examples only. For tailored recommendations for your unique needs and applications, please request an AnsellGUARDIAN® assessment. Or use our self-service AnsellGUARDIAN® Partner tool to search our extensive chemical permeation and degradation data to identify the appropriate hand and body protection for the chemicals you use.





**WARNING:** Vibration protection gloves do NOT provide protection from the blades of chainsaws or other powered equipment.

## VIBRATION PROTECTION

Vibration in the workplace is generally classified as hand–arm vibration transmitted through the use of hand-held powered equipment like chainsaws, brush cutters and hedge trimmers. Prolonged exposure can lead to damage to the hand and arm muscles (hand–arm vibration syndrome). The main concerns are the magnitude of vibration transmitted and the duration of exposure. Providing suitable PPE, such as Ansell anti-vibration gloves, may help to prevent these damages.



### ActivArm® 07-111

Minimizes the risks and effects of harsh vibrations on the job. Half finger model, for improved handling of screws, nails and small parts.



### ActivArm® 07-112

Minimizes the risks and effects of harsh vibrations on the job. Full finger model, is fully coated to keep hands clean, and is compliant to EN 10819:1996.

*Note: Product availability may vary. These styles serve as examples only. For tailored recommendations for your unique needs and applications, please request an AnsellGUARDIAN® assessment.*

## ERGONOMIC PROTECTION

Agricultural work can span a wide range of tasks from arduous to sedentary; from stooping, reaching, bending, and carrying out repetitive movements in awkward body positions, sitting in air-conditioned or heated comfort while operating sophisticated agricultural equipment. Gloves designed with Ansell's proprietary ERGOFORM™ Ergonomic Design Technology have been proven to effectively minimize discomfort from prolonged repetitive hand movements, enabling workers to work confidently and comfortably for longer.



### **MICROFLEX® XCEED® XC-310**

Ansell's most durable thin mil nitrile disposable glove. Featuring ERGOFORM™ Technology to reduce hand fatigue and improve performance.



### **MICROFLEX® Ultraform™ UF-524**

Comfortable, ultra-thin nitrile glove that offers affordable, tactile protection. Featuring ERGOFORM™ Technology to reduce hand fatigue and improve performance.



### **AlphaTec® 58-535B**

Enables users to handle wet or oily objects with less grip force and more control along with flexibility and dexterity to handle small objects thanks to ANSELL GRIP™ Technology. Shorter AlphaTec® 58-530B version available.



### **AlphaTec® 1800 COMFORT - Model 195**

Lightweight and breathable coverall with optimized body fit, improving wearer comfort and safety.



### **HyFlex® 11-939**

Our lightest weight durable solution with multi-risk cut, oil and liquid protection. 18-gauge design for enhanced dexterity and high-level comfort. Features reinforced thumb crotch.



### **HyFlex® 11-937**

Enhanced durability with 18-gauge design for superior dexterity and high-level comfort. Reinforced thumb crotch for increased protection and extended use life.



**Note:** Product availability may vary. These styles serve as examples only. For tailored recommendations for your unique needs and applications, please request an AnsellGUARDIAN® assessment.



## VIRAL PROTECTION

As a result of COVID-19, workplaces must consider the need to protect against the spread of illness and viral infection. Ansell offers a wide range of solutions that comply with the World Health Organization's guidance regarding infection prevention and control. In order to make an informed decision, product purchasers and users should stay abreast of the latest and most complete information regarding appropriate PPE to protect against COVID-19 and other viruses in their specific environments and applications.



### **MICROFLEX® XCEED® XC-310**

Extremely durable thin mil nitrile disposable glove for extra durability while maintaining tactility.



### **MICROFLEX® COBALT™ N-19**

Multi-purpose medical exam grade nitrile glove offers consistent comfort and durability to workers across a wide range of industries.



### **MICROFLEX® SUPRENO™ SE SU-690**

Advanced barrier protection against contaminants with a durable nitrile formulation. A sturdy glove ideal for long wear times. Examination grade.



### **AlphaTec® 37-300/ 37-310/37-320**

Unflocked glove to prevent the risk of food contamination and certified to protect against viruses according to the EN ISO 374-5 VIRUS standard.



### **AlphaTec® Solvex® 37-175**

Tested and certified for protection against viruses according to the EN ISO 374-5 VIRUS standard. Rugged chemical resistance with superior snag, puncture and abrasion resistance.



### **AlphaTec® Solvex® 37-676**

Tested and certified for protection against viruses according to the EN ISO 374-5 VIRUS standard and excellent chemical protection.



### **AlphaTec® 2000 Ts Plus - Model 111**

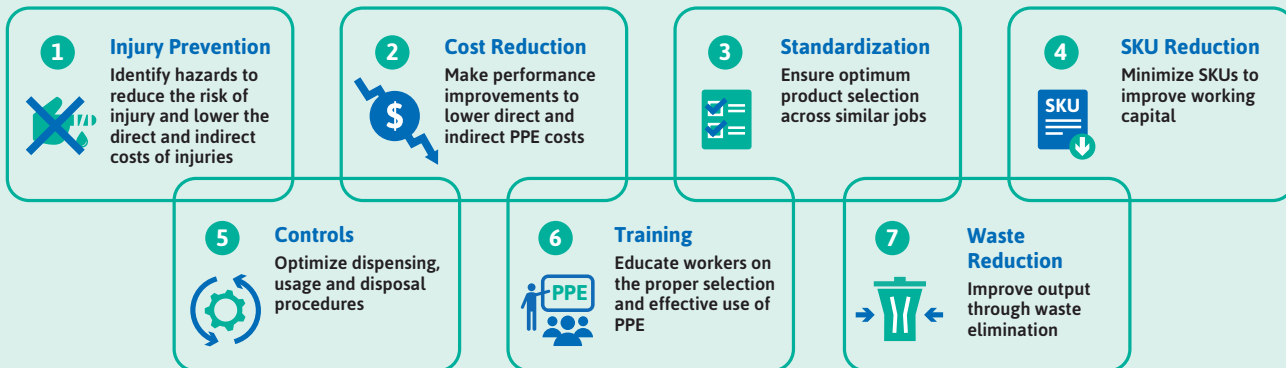
Guards against liquids and particulate biological hazards. Certified according to the EN 14126 to protect against infective agents such as bacteria, fungi and viruses and meets ASTM F 1671.



**Note:** Product availability may vary. These styles serve as examples only. For tailored recommendations for your unique needs and applications, please request an AnsellGUARDIAN® assessment. Gloves not labeled "examination grade" are not designed for use in medical or patient care settings.



AnsellGUARDIAN® is our consultative service to help companies select and implement the right personal protective equipment solutions to improve safety, increase productivity and reduce costs. Using our 125 years of experience, proprietary software system and database of over 30,000 chemicals, we analyze PPE needs and identify the solutions that will work best for each company's unique risks and applications. As an industry pioneer with the most advanced technology and analytics, we have evaluated and implemented best business practices in over 15,000 facilities worldwide, reducing injuries and saving companies a total of \$165M. AnsellGUARDIAN® assessments address 7 functional areas:



#### Get Started Today

There's no cost for an AnsellGUARDIAN® assessment. Learn how we can help you reduce injuries, improve productivity and lower costs. Contact your local Ansell Sales Representative or Customer Service Representative today.

#### ABOUT ANSELL

As a global leader in personal protective solutions with over 125 years of experience in keeping people safe, Ansell's mission is to provide innovative and reliable solutions for safety, well-being and peace of mind to workers around the world. Our global team of more than 12,000 people in 55 countries design, manufacture and market cutting edge PPE that millions of workers in industrial and healthcare settings rely upon every day. We offer a comprehensive portfolio of hand and body protection products and provide customers with tailored solutions to meet their unique needs across a wide range of industries and applications.

#### ANSELL HEALTHCARE PRODUCTS LLC

111 Wood Avenue South,  
Suite 210  
Iselin, NJ 08830, USA  
T: +1-800-800-0444

#### ANSELL CANADA INC

105 Lauder  
Cowansville, QC,  
J2K 2K8 Canada  
T: +1-800-363-8340

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**WARNING:** Products that provide "cut resistance" and "cut protection" or "puncture resistance" and "puncture protection" do not completely prevent or eliminate the potential for cuts or punctures, and are not intended or tested to provide protection against powered blades, serrated or other sharp or rotating equipment. Products that provide vibration resistance, "abrasion resistance" or "abrasion protection" do not completely prevent or eliminate the potential for vibration or abrasion-related injuries. Products that provide chemical resistance or "chemical protection" do not completely prevent or eliminate the potential for injury due to chemical exposure. Products that provide "resistance" to oil or grease or which are "oil repellent" do not completely prevent or eliminate the potential for oil or liquid penetration or absorption. Products that provide "snag resistance" or "snag protection" do not completely prevent or eliminate the potential for snags or friction-related injuries. Products that provide protection against sparks or flames are not "fireproof" and do not completely prevent or eliminate the potential for burns or associated injuries. Products that provide protection or resistance against heat or cold are not intended for use in extreme temperatures – use only as specified. Products containing natural rubber latex may cause allergic reactions in some individuals. Products that provide "impact, crush and pinch protection" do not completely eliminate the potential for impact or crush related injuries. Users are encouraged to always use caution and care when handling sharp or abrasive materials, chemicals, or other hazardous or dangerous substances.

Any information or data provided is based upon Ansell's current knowledge and understanding of the subject matter, and is offered solely as a possible suggestion for use in making your own decisions or product choices. Product users should conduct all appropriate testing or other evaluations to determine the suitability of Ansell products for a particular purpose or use within a particular environment. It is the responsibility of a product user to assess the level of risk and to determine the protective equipment required or appropriate for the user's particular purpose. Ansell may revise this information as new information, knowledge or experience becomes available. ANSELL DISCLAIMS ALL WARRANTIES OTHER THAN AS EXPRESSLY PROVIDED.